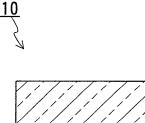
Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name. Douglas P. Mueller
Phone No.. 612.371.5237
Sheet 1 of 16



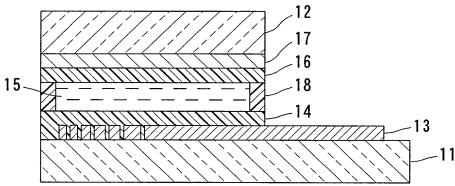


Fig. 1

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237
Sheet 2 of 16

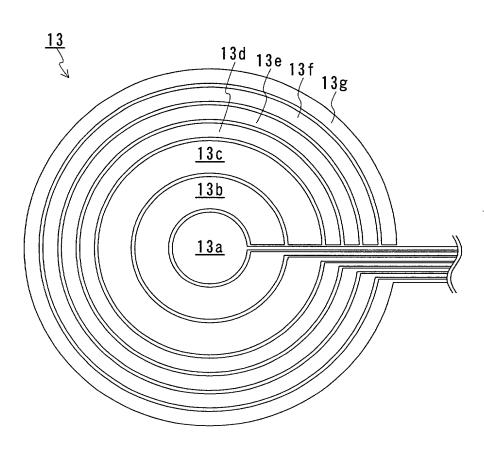


Fig. 2

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P. Mueller
Phone No.: 612 371.5237
Sheet 3 of 16

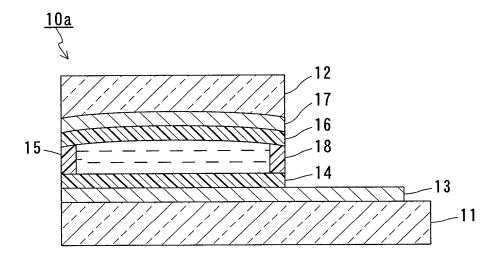


Fig. 3

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P Mueller
Phone No.: 612.371.5237
Sheet 4 of 16

The state state when state of the state of the state state

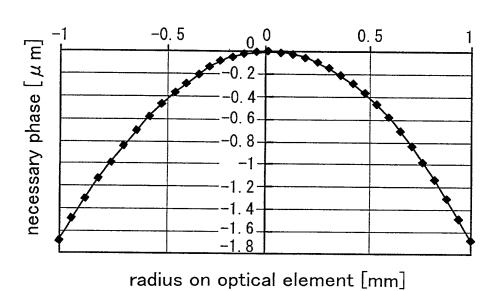


Fig. 4

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237
Sheet 5 of 16

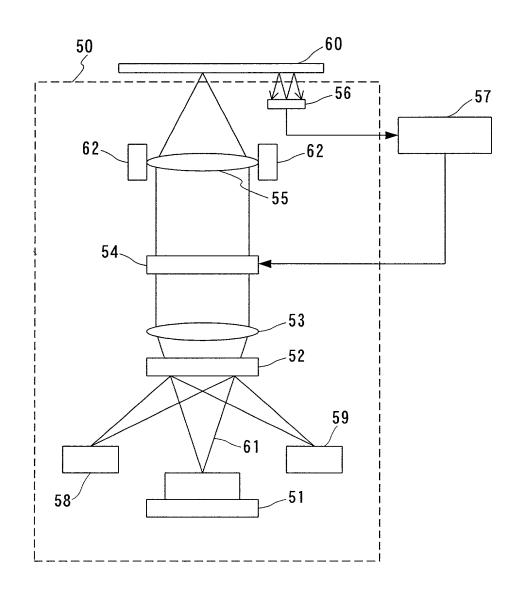


Fig. 5

Inventor: Wada et al.

Docket No.: 10873.772US01 Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING

APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD

Attorney Name: Douglas P. Mueller Phone No.: 612.371.5237 Sheet 6 of 16

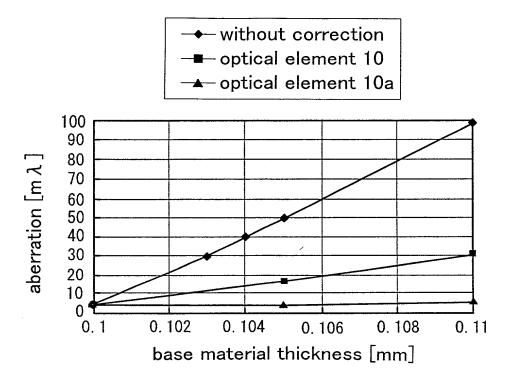


Fig. 6

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name Douglas P. Mueller
Phone No 612 371 5237

Sheet 7 of 16

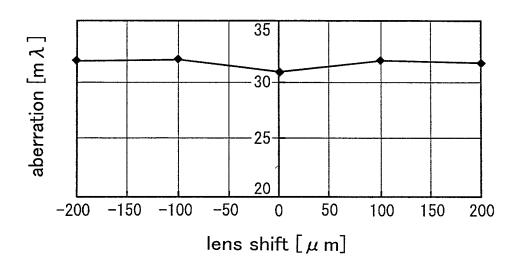


Fig. 7

Inventor: Wada et al.
Docket No.: 10873,772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name. Douglas P. Mueller
Phone No.: 612.371 5237
Sheet 8 of 16

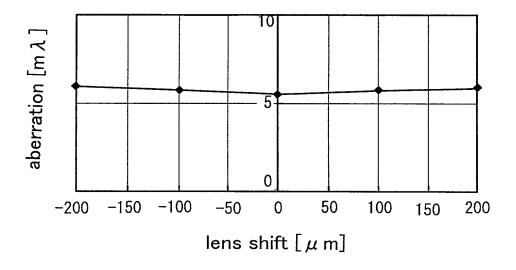


Fig. 8

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237
Sheet 9 of 16

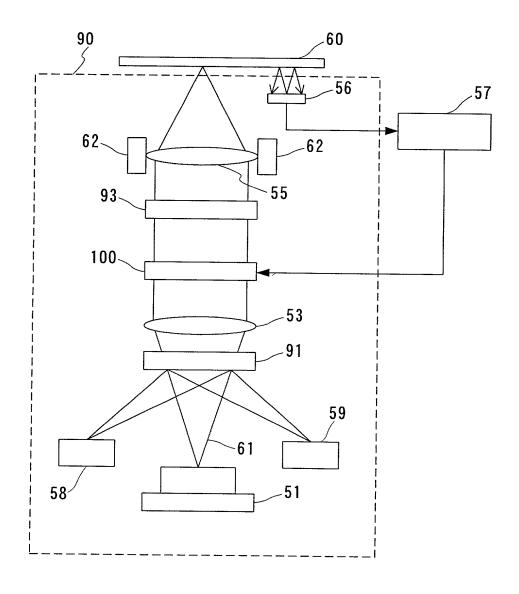


Fig. 9



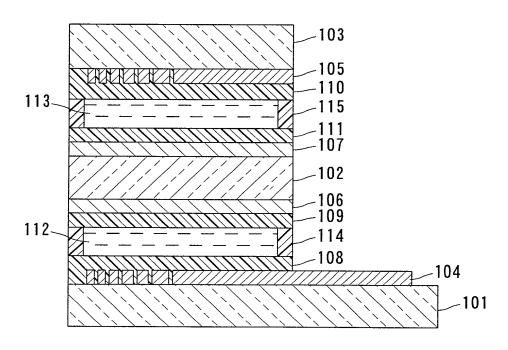


Fig. 10

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P Mueller
Phone No.: 612.371.5237
Sheet 11 of 16

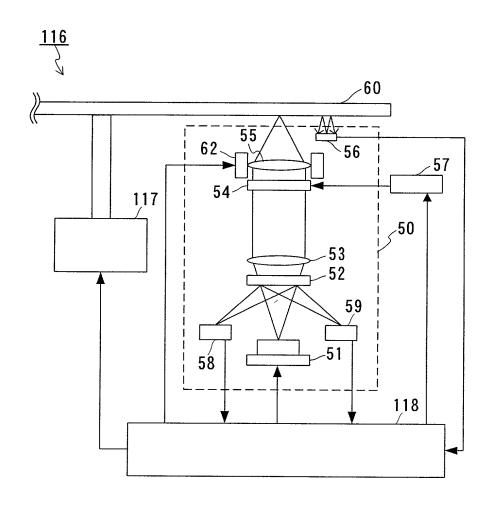
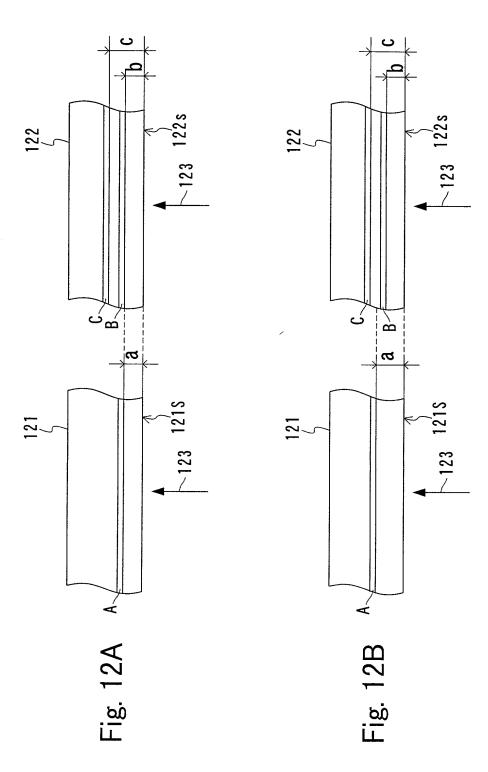


Fig. 11

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name: Douglas P. Mueller
Phone No.: 612.371.5237
Sheet 12 of 16



Inventor: Wada et al.
Docket No.: 10873.772US01
Title. OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD
Attorney Name Douglas P. Mueller
Phone No.: 612.371.5237

Sheet 13 of 16

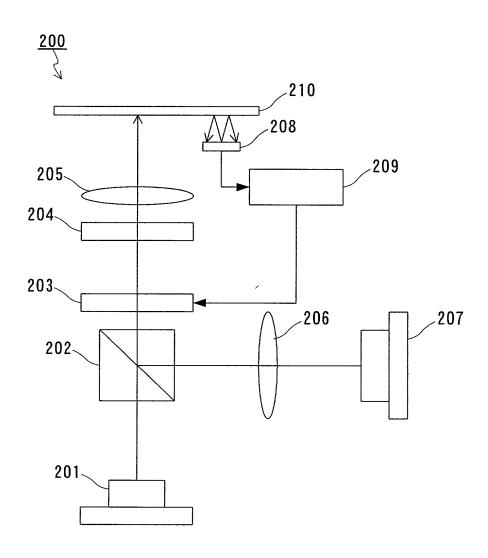


Fig. 13 PRIOR ART

Inventor: Wada et al. Docket No.: 10873.772US01

Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD

Attorney Name: Douglas P. Mueller Phone No. 612.371 5237 Sheet 14 of 16

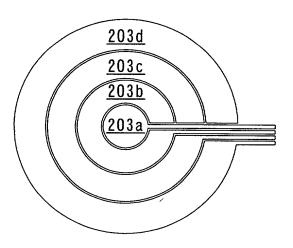


Fig. 14 PRIOR ART

Inventor: Wada et al.
Docket No.: 10873.772US01
Title. OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RECORDING/REPRODUCING APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD

Attorney Name: Douglas P. Mueller Phone No.: 612.371.5237

Sheet 15 of 16

 $0.1 \sim 0.2$ 

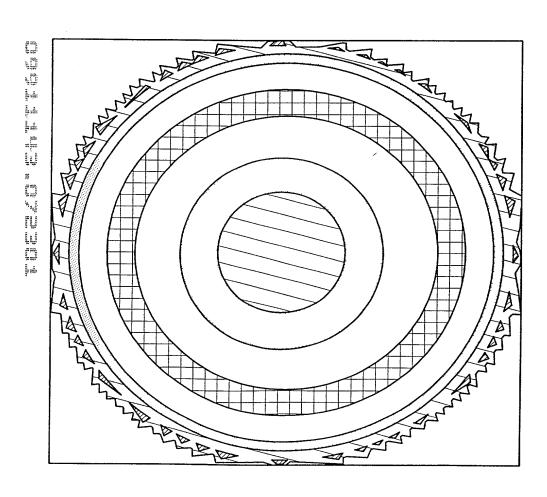


Fig. 15 PRIOR ART

Inventor: Wada et al.
Docket No.: 10873.772US01
Title: OPTICAL ELEMENT, OPTICAL HEAD, OPTICAL RE CORDING/REPRODUCING
APPARATUS AND OPTICAL RECORDING/REPRODUCING METHOD

Attorney Name. Douglas P. Mueller Phone No.: 612.371.5237

Sheet 16 of 16

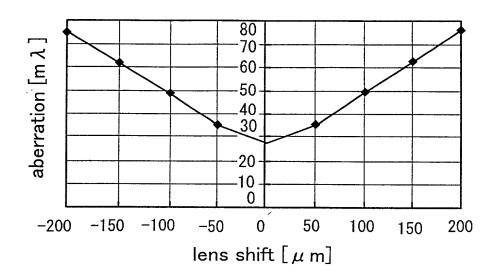


Fig. 16 PRIOR ART